

REMARKS

Claim Rejections 35 U.S.C. §112

Claims 4-6 have been rejected under 35 U.S.C. §112 as failing to comply with the written description requirement.

Applicant respectfully submits that the language of claim 4:

"wherein the conflicts resolution circuit defers to a protocol of the local memory during execution of a section of the program that is not a critical section"

is identically supported by paragraph [0017] of the specification which recites:

"the conflict resolution circuit may defer to the protocol of the local memory during execution of the section of the program that is not a critical section."

The next paragraph [0018] indicates that the purpose of this is to allow the system to make use of conventional cache coherence protocols used in a shared memory computer. More generally, paragraph [0043] discloses that in the preferred embodiment, the processor may use a cache coherence protocol. While this disclosure is not extensive, it is believed that this is sufficient to support claim 4, given that the claim 4 simply requires a default condition that adopts a normal cache protocol.

The rejection of claim 6 is also respectfully traversed.

In this case, the language of claim 6:

"wherein the globally unique clock includes a time variant field and a static processor-unit-dependant field"

is identical to paragraph [0019] of the specification which states that:

"[t]he globally unique clock may include a time variant field and a static processor-unit-dependant field".

The next paragraph [0020] explains that these fields provide a unique time stamp given the problems of practical synchronization. Specific examples of these fields are found at paragraph [0058] which describes the creation of the globally unique clock using a counter section counting occurrences of completions of the critical section, which is inherently time variant, and a static section holding a number that is unique for each processing unit, which is clearly a static processor unit dependent field. It is the intent that the claims cover not only a

counter section but any time variant field and thus are broader than the preferred embodiment described in the specification.

Claim 18 has been rejected for lack of clarity.

Applicant has made a minor amendment to claim 18 with the intent of improving its clarity and is open to further suggestions by the Examiner. It is noted that the language of claim 18 is essentially parallel to that of claim 17 that has not been objected to. These claims are intended to cover different ways that the present invention resolves conflicts.

The Applicant wishes to thank the Examiner for noting the inconsistency in claim terms and has amended claims 2, 4, 9, 12, 19 and 21 to correct these problems.

Claim Objections

Claims 6, 7, 12 and 13 have been amended to correct the erroneous dependency correctly noted by the Examiner.

Claim rejections 35 U.S.C. §102

Applicant has investigated the publication date of the reference to Rajwar, specifically the doctoral thesis entitled: "Speculation-Based Techniques for Transactional Lock-Free Execution of Locked-Based Programs" and has determined from University Microfilm, Inc, that the thesis was first available to the public on April 25, 2003, less than one year prior to the filing date of the present application. Accordingly, this thesis should not be prior art to the present application. It is noted that this same doctoral thesis forms the basis of the provisional application on which the present case is founded.

In light of these remarks and amendments, it is believed that claims 1-23 are now in condition for allowance and allowance is respectfully requested.

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Although no additional fees are believed due for filing this amendment, if an additional fee is deemed to be due, please charge any fee to Deposit Account No. 50-1170.

Respectfully submitted,

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